

AUG - 2 2004

**Celikey® IgG tTG (human, recombinant) IgG Antibody Assay – New Device
510(k) Submission
Section 9. Summary of Safety and Effectiveness**

**9. 510(K) SUMMARY OF SAFETY AND
EFFECTIVENESS**

This summary of safety and effectiveness information is being submitted in accordance with the requirements of The Safety Medical Devices Act of 1990 (SMDA 1990) and 21 CFR Part 807.92.

Assigned 510(k) Number: K041173

Date of Summary Preparation: April 28, 2004

Manufacturer: Sweden Diagnostics (Germany) GmbH
Munzinger Strasse 7
D-79111 Freiburg, Germany

Company Contact Person: Michael Linss
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Device Name: Celikey® IgG Tissue Transglutaminase
IgG Antibody Assay

Common Name: Tissue transglutaminase IgG autoantibody
immunological test system

Classification

<u>Product Name</u>	<u>Product Code</u>	<u>Class</u>	<u>CFR</u>
Celikey® IgG Tissue Transglutaminase IgG Antibody Assay	MVM	II	866.5660

Substantial Equivalence to

INOVA QUANTA Lite™ h-tTG (Human tissue transglutaminase)

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Intended Use Statement

Celikey IgG is intended for the semiquantitative and qualitative measurement of anti-tissue transglutaminase (tTG) IgG antibodies in human serum and plasma. Celikey IgG is based on recombinant human tissue transglutaminase as antigen and is useful as an aid in the clinical diagnosis of patients with celiac disease.

General Description of the Device

Celikey IgG is an indirect noncompetitive enzyme immunoassay for the semiquantitative and qualitative determination of tTG (IgG) antibodies in human serum or plasma. Antibodies specific for tTG present in the patient sample bind to the antigen.

The test kit contains microplate strips coated with purified recombinant human tTG antigen, calibrators, positive and negative controls, enzyme-labeled conjugate, substrate and substrate stop solution, sample diluent and wash buffer.

Celikey® IgG tTG IgG Antibody Assay Test Principle

Celikey IgG is an indirect noncompetitive enzyme immunoassay for the semiquantitative and qualitative determination of tTG (IgG) antibodies in human serum or plasma. The wells of a microplate are coated with recombinant human tTG antigen. Antibodies specific for tTG present in the patient sample bind to the antigen.

In a second step the enzyme labeled second antibody (conjugate) binds to the antigen-antibody complex which leads to the formation of an enzyme labeled conjugate-antibody-antigen complex. The enzyme labeled antigen-antibody complex converts the added substrate to form a colored solution.

The rate of color formation from the chromogen is a function of the amount of conjugate complexed with the bound antibody and thus is proportional to the initial concentration of the respective antibodies in the patient sample.

Device Comparison

Both assays (the predicate and the new device) are indirect noncompetitive enzyme immunoassays for the semi-quantitative and qualitative determination of IgG antibodies to tissue transglutaminase (endomysium) in human serum. Both assays recommend the same sample dilutions and use comparable antigens and detection systems.

In accordance to the relevant scientific literature both assays state in the Intended Use, that the measuring of the IgG antibodies against tissue transglutaminase provides aid in the diagnosis of patients with celiac disease.

A difference between both assays is that the predicate device is only recommended for use in serum specimen while the new device is, intended for use with serum and plasma.

The cut-off in the predicate device assay is evaluated by using a low and a high positive Standard and a grading of the results in negative, weak, moderate and strong positive. The new device uses a set of six Calibrators and classifies the results as negative, equivocal and positive.

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Laboratory equivalence

The comparability of INOVA QUANTA Lite™ h-tTG IgG and Celikey® IgG tTG IgG Antibody assay is supported by a data set including

- results obtained within a comparison study analyzing positive, equivocal and negative sera.
- results obtained for clinically defined sera.
- results obtained for samples from apparently healthy subjects (normal population).

The data show that the assay performs as expected from the medical literature.

In summary, all available data support that the new device is substantially equivalent to the predicate device and that the new device performs according to state-of-the-art expectations.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration
2098 Gaither Road
Rockville MD 20850

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Michael Linss, Ph.D
Manager, Compliance and Quality
Sweden Diagnostics (Germany) GmbH
Munzinger Strasse 7
D-79111 Freiburg, GERMANY

Re: k041173
Trade/Device Name: Celikey® IgG Tissue Transglutaminase (human, recombinant)
IgG Antibody Assay
Regulation Number: 21 CFR 866.5660
Regulation Name: Multiple autoantibodies immunological test system
Regulatory Class: Class II
Product Code: MVM
Dated: July 12, 2004
Received: July 14, 2004

Dear Dr. Linss:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

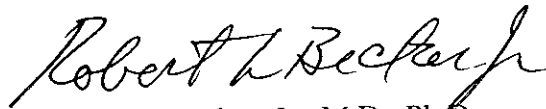
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820). This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed

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If you desire specific information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (301) 594-3084. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>.

Sincerely yours,

A handwritten signature in black ink, reading "Robert L. Becker, Jr." in a cursive script.

Robert L. Becker, Jr., M.D., Ph.D.

Director

Division of Immunology and Hematology Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number: K041173

Device Name: **Celikey® IgG Tissue Transglutaminase (human, recombinant)
IgG Antibody Assay**

Indications For Use:

Celikey IgG is intended for the semiquantitative and qualitative measurement of anti-tissue transglutaminase (tTG) IgG antibodies in human serum and plasma. Celikey IgG is based on recombinant human tissue transglutaminase as antigen and is useful as an aid in the clinical diagnosis of patients with celiac disease.

Prescription Use ✓
(Per 21 CFR 801.109)

AND/OR

Over-The-Counter Use _____
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF
NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Maria M. Chan
Division Sign-Off

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Office of In Vitro Diagnostic
Device Evaluation and Safety

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